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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,544	07/24/2003	Naokatsu Ikegami	02DCOAI010-CA	8199
26071	7590	07/19/2005	EXAMINER	
JUNICHI MIMURA OKI AMERICA INC. 1101 14TH STREET, N.W. SUITE 555 WASHINGTON, DC 20005			POTTER, ROY KARL	
			ART UNIT	PAPER NUMBER
			2822	

DATE MAILED: 07/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/625,544

Applicant(s)

IKEGAMI, NAOKATSU

Examiner

Roy K. Potter

Art Unit

2822

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 17-20, 22, 23 and 25-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-20, 22, 23 and 25-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

Prosecution on the merits of this application is reopened on claims 17 – 20, 22-23, 25-30 considered unpatentable for the reasons indicated below:

### ***Response to Arguments***

Applicant's arguments, with respect to the rejection(s) of claim(s) 17 – 30 under 35 U.S.C. 101 as claiming the same invention as prior Patent No. 6,624,010 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of U.S. Patent 6,624,010 in view of U.S. Patent No. 6,331,486.

### ***Double Patenting***

Claims 17 – 20, 22 – 23, 25 - 30 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1- 16 of U.S. Patent No. 6,624,010 in view of Cabral, Jr. et al..

U.S. Patent No. 6,624,010 discloses the claimed invention except that the second annealing step of the silicide layer is not described as being specifically a rapid thermal anneal.

Cabral Jr. et al., U.S. Patent No. 6,331,486 discloses a method for the reduction of contact resistance of metal silicides using a metal germanium alloy. As described, and claimed in claim 1, for example, the method includes step b, the formation of a

Art Unit: 2822

metal silicide layer and if Cobalt is the metal used, a second annealing takes place, in step c, with the second annealing being a rapid thermal anneal, as recited in claim 18. Cabral teaches that this second annealing step converts the metal silicide into the lowest resistance silicide phase of the material. The rapid thermal annealing is described in column 6, line 32 as being between 700 degrees and 900 degrees and lasting about 300 seconds.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the rapid thermal annealing of Cabral , Jr. et al. in the method of U.S. Patent 6,624,010.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 2822

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roy K. Potter whose telephone number is 571 272 1842. The examiner can normally be reached on M-F.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Roy K Potter  
Primary Examiner  
Art Unit 2822